| UTILITY            |
|--------------------|
| PATENT APPLICATION |
| TRANSMITTAL        |

5163-004/CIT-4 Attorney Docket No. First Inventor or Application Identifier Kocher, et al. Alternativ Energy System Control Method and Apparatus Title PT. EV 368751615 US Express Mail Label No.

(Only for new nonprovisional applications under 37 CFR § 1.53(b))

| APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents. |                                                      |                                      |                         |                                                                  |                          |                                       |               | ADDRESS TO:                                                       | Mail Stop Patent<br>Commissioner for<br>P.O. Box 1450<br>Alexandria, VA | or Patents              | 0 U<br>7748 |
|-------------------------------------------------------------------------------------------|------------------------------------------------------|--------------------------------------|-------------------------|------------------------------------------------------------------|--------------------------|---------------------------------------|---------------|-------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------|-------------|
| 1.<br>2.                                                                                  |                                                      | (Submit                              | an<br>atio              |                                                                  |                          | 6.<br>7.                              |               | Microfiche Compu<br>cleotide and/or Amir<br>applicable, all neces | uter Program <i>(A</i><br>no Acid Sequen<br>ssary)                      | ppendix)                | 223         |
|                                                                                           |                                                      |                                      |                         | arrangement set forth below)                                     |                          |                                       | a.            |                                                                   | eadable Copy                                                            |                         |             |
|                                                                                           |                                                      |                                      | •                       | tive title to the Invention                                      |                          |                                       | b.            | _ ` ` ` `                                                         | (identical to con                                                       |                         |             |
| l                                                                                         |                                                      |                                      |                         | References to Related Applications                               |                          |                                       | C.            | Statement ve                                                      | erifying identity                                                       | of above copies         |             |
|                                                                                           |                                                      |                                      |                         | ent Regarding Fed sponsored R & D note to Microfiche Appendix    |                          |                                       |               | ACCOMPANY                                                         | ING APPLICAT                                                            | ION PARTS               |             |
|                                                                                           |                                                      |                                      |                         | ound of the Invention                                            |                          | 8.                                    | П             | Assignment Pape                                                   |                                                                         |                         |             |
|                                                                                           |                                                      |                                      | -                       | mmary of the Invention                                           |                          | 9.                                    | Ħ             |                                                                   |                                                                         | Power of Attorn         | ney         |
|                                                                                           |                                                      | — Brief                              | De                      | escription of the Drawings (if filed)                            |                          |                                       | _             | (when there is an                                                 |                                                                         |                         | , l         |
|                                                                                           |                                                      |                                      |                         | d Description                                                    |                          | 10.                                   |               | English Translatio                                                | n Document (if                                                          | applicable)             |             |
|                                                                                           |                                                      | <ul><li>Clain</li><li>Abst</li></ul> | •                       | )<br>t of the Disclosure                                         |                          | 11.                                   |               | Information Disclo<br>Statement (IDS)/F                           |                                                                         | Copies of IDS Citations |             |
| 3.                                                                                        | $\boxtimes$                                          | Drawing                              | J(S)                    | (35 U.S.C. 113) [Total Sheets 8 ]                                |                          | 12.                                   |               | Preliminary Amen                                                  | dment                                                                   |                         |             |
| 4.                                                                                        | ⊠<br>a.                                              |                                      |                         | Declaration (unsigned) [Total F<br>y executed (original or copy) | Pages 4 ]                | 13.                                   | $\boxtimes$   | Return Receipt Po                                                 |                                                                         | 503)                    |             |
|                                                                                           | b.                                                   | □∞                                   | ру                      | from a prior application (37 C.F.R. § 1                          |                          | 14.                                   |               | *Small Entity                                                     | Statement                                                               | filed in prior applica  |             |
|                                                                                           |                                                      | (fo                                  | r co                    | ontinuation/divisional with Box 17 com                           | npleted)                 |                                       |               | Statement(s)                                                      |                                                                         | proper and desired      |             |
|                                                                                           |                                                      | . –                                  | ۱.                      | [Note Box 5 below]                                               |                          | 15.                                   | ш             | Certified Copy of I                                               |                                                                         | ent(s)                  | ĺ           |
|                                                                                           |                                                      | i                                    |                         | DELETION OF INVENTOR(S) Signed statement attached deleting       |                          | 40                                    |               | · - ·_ ·                                                          | s Mail Certificati                                                      | ion                     |             |
| ĺ                                                                                         |                                                      |                                      |                         | inventor(s) named in the prior applicat                          | ion                      | 16.                                   |               | Other: Express                                                    | 3 Mail Commodu                                                          |                         |             |
|                                                                                           |                                                      |                                      |                         | see 37 C.F.R. §§ 1.63(d)(2) and 1.33(l                           |                          |                                       |               |                                                                   |                                                                         |                         | i           |
| 5.                                                                                        | $\Box$                                               | Incomo                               |                         | on By Reference (useable if Box 4b is                            |                          |                                       | * 8./         | OTE FOR ITEMS 1                                                   | 2 14: IN ORDI                                                           | ER TO RE                |             |
| ٦.                                                                                        | ш                                                    |                                      |                         | disclosure of the prior application, from                        |                          |                                       |               | TITLED TO PAY SI                                                  |                                                                         |                         |             |
| ļ                                                                                         |                                                      |                                      |                         | e oath or declaration is supplied under                          |                          |                                       |               | TITY STATEMENT                                                    |                                                                         |                         | 1           |
|                                                                                           | is considered as being part of the disclosure of the |                                      |                         |                                                                  |                          | .27), EXCEPT IF O<br>PLICATION IS REL |               |                                                                   |                                                                         |                         |             |
| accompanying application and is hereby incorporated by                                    |                                                      |                                      |                         |                                                                  | ~                        | reioxiloivio nee                      | ILD OF ON (OF | O.7 .71. § 7.20).                                                 |                                                                         |                         |             |
| reference therein.                                                                        |                                                      |                                      |                         |                                                                  |                          |                                       |               |                                                                   |                                                                         |                         |             |
| 17.                                                                                       | If a                                                 | CONTIN                               | UIN                     | NG APPLICATION, check appropriate                                | box and sup              | ply the                               | e req         | uisite information be                                             | elow and in a pr                                                        | eliminary statement     | :           |
|                                                                                           |                                                      | Conti                                | nua                     | ation 🗌 Divisional 🔲 Co                                          | ontinuation-in           | -part (                               | CIP)          | of prior appli                                                    | cation No:                                                              | /                       |             |
|                                                                                           | Prior application information: Examiner:             |                                      |                         |                                                                  |                          |                                       | Group/Art     | Unit:_                                                            |                                                                         |                         |             |
|                                                                                           |                                                      |                                      |                         | 18. C                                                            | ORRESPON                 | IDEN                                  | CE AI         | DDRESS                                                            |                                                                         |                         |             |
| ☐ Customer Number or ☐ Correspondence address below                                       |                                                      |                                      |                         |                                                                  |                          |                                       |               |                                                                   |                                                                         |                         |             |
|                                                                                           |                                                      |                                      |                         |                                                                  |                          |                                       |               |                                                                   |                                                                         |                         |             |
| NAME<br>ADDRESS                                                                           |                                                      | ΤL                                   | ĀF                      | RRY I. GOLDEN                                                    | <del></del>              |                                       |               |                                                                   |                                                                         |                         |             |
|                                                                                           |                                                      |                                      | SQUARE D COMPANY        |                                                                  |                          |                                       |               |                                                                   |                                                                         |                         |             |
|                                                                                           |                                                      | SS 1                                 | 1415 South Roselle Road |                                                                  |                          |                                       |               |                                                                   |                                                                         |                         |             |
|                                                                                           |                                                      |                                      |                         |                                                                  |                          |                                       |               |                                                                   |                                                                         |                         |             |
| CITY                                                                                      |                                                      | F                                    | ala                     | atine                                                            |                          | STAT                                  | ΕI            | L                                                                 | ZIP CODE                                                                | 60067                   |             |
| COUNTRY                                                                                   |                                                      | ₹Y L                                 | USA TELE                |                                                                  |                          | PHON                                  | E 8           | 347-925-3458                                                      | FAX                                                                     |                         |             |
| Name (Print/Type) Michael D. Murphy                                                       |                                                      |                                      |                         |                                                                  | Registration No. (Attorr | ney/Agent)                            | 44,958        |                                                                   |                                                                         |                         |             |
| Signature Mul 1 Million                                                                   |                                                      |                                      |                         |                                                                  | •                        |                                       | Date          | D c mber 30, 20                                                   | 03                                                                      |                         |             |

Burden Hour Statement: This form-is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/17 (2/98)
Approved for use through 9/30/2000. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

| Sunder the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number of the control numbe |                      |                  |  |  |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------|--|--|--|--|--|
| FEE TRANSMITTAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Complete if Known    |                  |  |  |  |  |  |
| Patent fees are subject to annual revision on October 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Application Number   | TBA              |  |  |  |  |  |
| These are the fees effective December 29, 1999.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Filing Date          |                  |  |  |  |  |  |
| Smell Entity payments must be supported by a small entity statement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | First Named Inventor | Mark John Kocher |  |  |  |  |  |
| otherwise large entity fees must be paid. See Forms PTO/SB/09-12.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Examiner Name        | TBA              |  |  |  |  |  |
| See 37 C.F.R. §§ 1.27 and 1.28.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Group Art Unit       | TBA              |  |  |  |  |  |
| TOTAL AMOUNT OF PAYMENT (\$)1,378.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Attorney Docket No.  | 5163-004/CIT-4   |  |  |  |  |  |

| METHOD OF PAYMENT (check one)                                                                                         | FEE CALCULATION (continued) |             |            |            |                                                                               |                                                  |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------|------------|------------|-------------------------------------------------------------------------------|--------------------------------------------------|
| The Commission is hereby authorized to charge                                                                         | 3.                          | ADDIT       | TONAL      | FEES       |                                                                               |                                                  |
| <ol> <li>The Commission is hereby authorized to charge<br/>indicated fees and credit any over payments to:</li> </ol> | Large                       | Entity      | Small      | Entity     |                                                                               |                                                  |
| indicated toos and drout any over payments to.                                                                        | Fee                         | Fee         | Fee        | Fee        | Fee Description                                                               | ) Paid                                           |
| Deposit                                                                                                               | Code                        | (\$)        | Code       | (\$)       |                                                                               |                                                  |
| Account 18-1167                                                                                                       | 105                         | 130         | 205        | 65         | Surcharge - late filing fee or oath                                           |                                                  |
| Number                                                                                                                | 127                         | 50          | 227        | 25         | Surcharge - late provisional filing fee                                       |                                                  |
| Deposit                                                                                                               |                             |             |            |            | or cover sheet                                                                |                                                  |
| Account Coats & Bennett, P.L.L.C.                                                                                     | 139                         | 130         | 139        | 130        | Non-English specification                                                     |                                                  |
| Name                                                                                                                  | 147                         | 2,520       | 147        | 2,520      | For filing a request for reexamination                                        | <b>-</b>                                         |
|                                                                                                                       | 112                         | 920*        | 112        | 920*       | Requesting publication of SIR prior to Examiner action                        |                                                  |
| Charge Any Additional Charge the Issue Fee Set in                                                                     | 113                         | 1,840*      | 113        | 1,840*     | Requesting publication of SIR after                                           |                                                  |
| Fee Required Under 37 CFR §1.18 at the Mailing of the                                                                 | 1 '''                       | 1,040       |            | 1,040      | Examination action                                                            |                                                  |
| 37 CFR §§1.16 and 1.17 Notice of Allowance                                                                            | 115                         | 110         | 215        | 55         | Extension for reply within first month                                        |                                                  |
| 2. A Payment Enclosed:                                                                                                | 116                         | 380         | 216        | 190        | Extension for reply within second month                                       |                                                  |
|                                                                                                                       | 117                         | 870         | 217        | 435        | Extension for reply within third month                                        |                                                  |
|                                                                                                                       | 118                         | 1,360       | 218        | 680        | Extension for reply within fourth month                                       |                                                  |
| FEE CALCULATION                                                                                                       | 128                         | 1,850       | 228        | 925        | Extension for reply within fifth month                                        |                                                  |
| 1. BASIC FILING FEE                                                                                                   | 119                         | 300         | 219        | 150        | Notice of Appeal                                                              | <b>—</b>                                         |
| Large Entity Small Entity                                                                                             | 120<br>121                  | 300<br>260  | 220<br>221 | 150<br>130 | Filing a brief in support of an appeal Request for oral hearing               | $\vdash$                                         |
| Fee Fee Fee Fee Description Fee Paid                                                                                  | 138                         | 1,510       | 138        | 1,510      | Petition to institute a public use proceeding                                 | $\vdash$                                         |
| Code (\$) Code (\$)                                                                                                   | 140                         | 110         | 240        | 55         | Petition to revive - unavoidable                                              | <del>                                     </del> |
| 101 770 201 345 Utility filing fee 770.00                                                                             | 141                         | 1,210       | 241        | 605        | Petition to revive - unintentional                                            |                                                  |
| 106 310 206 155 Design filling fee<br>107 480 207 240 Plant filling fee                                               | 142                         | 1,210       | 242        | 605        | Utility issue fee (or reissue)                                                |                                                  |
| 108 760 208 380 Reissue filing fee                                                                                    | 143                         | 430         | 243        | 215        | Design issue fee                                                              |                                                  |
| 114 150 214 75 Provisional filing fee                                                                                 | 144                         | 580         | 244        | 290        | Plant issue fee                                                               |                                                  |
| SUBTOTAL (1) (\$)770.00                                                                                               | 122                         | 130         | 122        | 130        | Petitions to the Commissioner                                                 |                                                  |
| 30B101AE(1) ((3)170.00                                                                                                | 123                         | 50          | 123        | 50         | Petitions related to provisional applications                                 |                                                  |
| 2. EXTRA CLAIM FEES                                                                                                   | 126                         | 240         | 126        | 240        | Submission of Information Disclosure Stmt.                                    | <b> </b>                                         |
| Fee from                                                                                                              |                             |             |            |            |                                                                               | <b>—</b>                                         |
| Extra Claims below Fee Paid                                                                                           | 581                         | 40          | 581        | 40         | Recording each patent assignment per<br>property (times number of properties) |                                                  |
| Total Claims 49 -20** = 29 X 18.00 = 522.00                                                                           | 146                         | 760         | 246        | 380        | Filing a submission after final rejection                                     |                                                  |
| Independent 4 -3** = 1 X 86.00 = 86.00                                                                                |                             |             |            |            | (37 CFR 1.129(a))                                                             |                                                  |
| Claims                                                                                                                | 149                         | 760         | 249        | 380        | For each additional invention to be                                           |                                                  |
| Multiple Dependent Claims X =  *** or number previously paid, if greater; For Reissues, see below                     |                             |             |            |            | examined (37 CFR 1.129(b))                                                    |                                                  |
| Large Entity Small Entity                                                                                             |                             |             |            |            |                                                                               |                                                  |
| Fee Fee Fee Fee Description                                                                                           | Other fe                    | e (specify) |            |            |                                                                               |                                                  |
| Code (\$) Code (\$)                                                                                                   |                             |             |            |            |                                                                               |                                                  |
| 103 18 203 9 Claims in excess of 20                                                                                   | Other fe                    | e (specify) | ı          |            |                                                                               |                                                  |
| 102 78 202 39 Independent claims in excess of 3                                                                       |                             | • • • •     |            | 41         |                                                                               |                                                  |
| 104 260 204 130 Multiple dependent claim                                                                              | 1                           |             |            |            |                                                                               |                                                  |
| 109 78 209 39 **Reissue independent claims                                                                            | 1                           |             |            |            |                                                                               |                                                  |
| over original patent                                                                                                  | *Beduce                     | ed by Basic | : Filina F | ee Paid    | SUBTOTAL (3) (\$)                                                             |                                                  |
| 110 18 210 9 **Reissue claims in excess of 20                                                                         |                             | ,           | y ·        |            | 222 22 11 12 (2) ( <del>14)</del>                                             |                                                  |
| and over original patent                                                                                              |                             |             |            |            |                                                                               |                                                  |
| SUBTOTAL (2) (\$)608.00                                                                                               | 1                           |             |            |            |                                                                               |                                                  |
| 305 TOTAL (2)   (4)000.00                                                                                             |                             |             |            |            |                                                                               |                                                  |

| SUBMITTED BY             |                   | Complete (if applicable) |                   |                            |         |
|--------------------------|-------------------|--------------------------|-------------------|----------------------------|---------|
| Typed or<br>Printed Name | Michael D. Murphy |                          |                   | Reg. Number                | 44,958  |
| Signature                | Mula D Mu         | Date                     | December 30, 2003 | Deposit Account<br>User ID | 18-1167 |

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re Application of:                                         | )                                                            |
|---------------------------------------------------------------|--------------------------------------------------------------|
| Koch r, et al.                                                | )<br>)<br>> EVDDESS MAIL CEDTIEICATION                       |
| Serial No.:                                                   | ) EXPRESS MAIL CERTIFICATION<br>) LABEL NO.: EV 368751615 US |
| Filed:                                                        |                                                              |
| Title: Alternative Energy System Control Method and Apparatus |                                                              |
| Attorney's Docket No: 5163-004/CIT-4                          | Raleigh, North Carolina                                      |

MAIL STOP PATENT APPLICATION COMMISSIONER FOR PATENTS P.O. BOX 1450 ALEXANDRIA, VA 22313-1450

Sir:

## EXPRESS MAIL CERTIFICATE LABEL NO.: EV 368751615 US DATE MAILED: December 30, 2003

I hereby certify that the enclosed US Utility Patent Application Transmittal Form, Fee Transmittal Form (2 Copies), specification and claims, drawings (1 set of 8 sheets), Declaration and Power of Attorney (unsigned), and our check number 10889 in the amount of \$1,378.00 are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. §1.10 on the date indicated above and is addressed to: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Respectfully submitted,

**COATS & BENNETT, P.L.L.C.** 

By:

Michael D. Murphy Registration No. 44,958

Telephone: (919) 854-1844